# ROAD TECH™ QUEST™ GLOBAL POSITIONING SYSTEM (GPS) MOUNTING KIT

## **GENERAL**

#### **Kit Number**

92100-05

#### Models

For model fitment information, please see the P&A Retail Catalog or the Parts and Accessories section of www.harleydavidson.com (English only).

### **Additional Parts Required**

A Road Tech Quest GPS System Kit, Part Number 92104-05 (for Europe), 92106-05 (for North America) or 92129-05 (for Australia) is required. This item is available from a Harley-Davidson Dealer.

If the wires of circuit [29B] are already in use, you will need to purchase multiple accessory harness (black) Part Number 70458-05 and multiple accessory harness (orange/white) Part Number 70459-05. These item is available from a Harley-Davidson Dealer.

## **A**WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

## NOTE

This instruction sheet references Service Manual information. A Service Manual for your model motorcycle is required for this installation and is available from a Harley-Davidson Dealer.

### **Electrical Overload**

## **CAUTION**

It is possible to overload your motorcycle's charging system by adding too many electrical accessories. If your combined electrical accessories operating at any one time consume more electrical current than your vehicle's charging system can produce, the electrical consumption can discharge the battery and cause vehicle electrical system damage. See a Harley-Davidson dealer for advice about the amount of current consumed by additional electrical accessories, or for necessary wiring changes. (00211b)

## WARNING

When installing any electrical accessory, be certain not to exceed the maximum amperage rating of the fuse or circuit breaker protecting the affected circuit being modified. Exceeding the maximum amperage can lead to electrical failures, which could result in death or serious injury. (00310a)

The Road Tech Quest requires up to 210 milliamps additional current from the electrical system.

#### **Kit Contents**

See Figure 5 and Table 1.

#### INSTALLATION

#### NOTE

Do not use solvent-based chemicals or waxes directly on the plastic or rubber components as they can affect the overall performance and appearance of the plastic and rubber.

#### For 2003 and earlier models

## **AWARNING**

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

1. Refer to the Service Manual and follow the instructions given to remove the seat and disconnect the negative battery cable. Retain all seat mounting hardware. Proceed to Step 2.

#### For 2004 and later models

## **AWARNING**

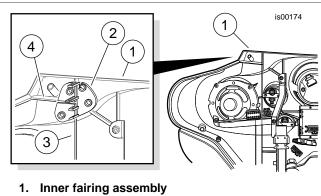
To prevent accidental vehicle start-up, which could cause death or serious injury, remove maxi-fuse before proceeding. (00251a)

. Refer to the Service Manual and follow the instructions given to remove the Maxi® fuse. Proceed to Step 2.

## Installing the Hot Shoe

- Remove the outer fairing and windshield. Refer to OUTER FAIRING/ WINDSHIELD (FLHT/C/U): REMOVAL in the Service Manual.
- See Figure 5. Obtain the Hot Shoe back plate (3) from the kit.

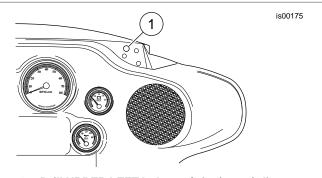
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- 2. GPS back plate
- 3. Vertical rib
- 4. Horizontal rib

Figure 1. Position Back Plate for Drilling

- 4. See Figure 1. Position the back plate (2) to the motorcycle inner fairing (1) as shown, fitting the T-slot in the back plate over the horizontal (4) and vertical (3) ribs at the top left corner of the inner fairing (as viewed from the front of the motorcycle).
- Hold the back plate firmly in place, and use as a template to drill four (4) 7/32 in. (5.5 mm) diameter holes in the inner fairing.
- Remove the back plate from the fairing and set it aside. From the rider's side of the fairing, drill out only the upper left hole (see Figure 2) to 3/8 in. (9 mm) diameter.



1. Drill UPPER LEFT hole to 3/8 in. (9 mm) diameter

Figure 2. Enlarge Upper Left Hole in Fairing

- 7. See Figure 5. Obtain the Hot Shoe (1) from the Road Tech Quest GPS System Kit. If the gasket (2) is loose, fit the gasket to the rear of the Hot Shoe. Feed the wire harness connected to the Hot Shoe through the larger hole drilled in Step 6. Seat the Hot Shoe to the fairing.
- 8. Position the back plate (3) as had been done in Step 4, fitting the wire harness into the slot next to the upper right hole.
- Fasten the back plate through the fairing to the Hot Shoe with the three screws (4) from the kit. Tighten the screws securely.
- See Figure 3. Using a diagonal cutter, clip the two upper "bridges" on the back plate to avoid interference with the windshield.

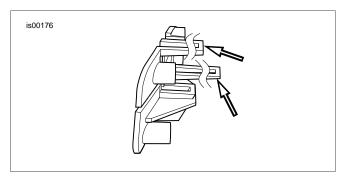


Figure 3. Clip Off Two Upper Bridges

#### **Routing and Connecting the Wiring**

- See Figure 5. Obtain the fuse holder harness (5) and heat shrink tube (7) from the kit. Slide the heat shrink tube onto the black wire on the fuse holder harness.
- 12. Crimp the butt splice of the black wire from the fuse harness to the red wire of the GPS mount harness. Refer to the SEALED BUTT-SPLICE CONNECTORS section of the Service Manual for crimping instructions.
- 13. Slide the heat-shrink tube (installed in Step 11) over the splice area.

## **A**WARNING

Be sure to follow manufacturer's instructions when using the UltraTorch UT-100 or any other radiant heating device. Failure to follow manufacturer's instructions can cause a fire, which could result in death or serious injury. (00335a)

- Avoid directing heat toward any fuel system component. Extreme heat can cause fuel ignition/ explosion resulting in death or serious injury.
- Avoid directing heat toward any electrical system component other than the connectors on which heat shrink work is being performed.
- Always keep hands away from tool tip area and heat shrink attachment.
- 14. Use the radiant-heating device to shrink the heat-shrink tubing to the wires and splice.

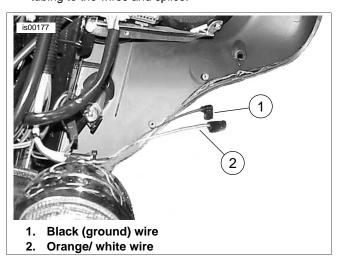


Figure 4. Wires for GPS Connection

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15. See Figure 4, and the INTERCONNECT HARNESS wiring diagram in the Service Manual. Proceed according to the availability of the black (1) and orange/ white (2) wires of the position lamp circuit [29B] of the interconnect harness, located near the headlamp:

If the wires of circuit [29B] are unused, and the tab connectors on the wire ends are intact:

- Remove the tape tying the black (1) and orange/ white
   (2) wires of circuit [29B] to the interconnect harness.
- Connect the orange/ white wire from the fuse holder harness to the orange/ white wire of the unused position lamp circuit [29B].
- c. See Figure 5. Obtain tab housing (9) from the kit. Fit the housing onto the tab terminal on the black wire from the GPS mount.
- d. Connect the black wire from the GPS mount to the black wire of circuit [29B].

#### If the wires of circuit [29B] are already in use:

- Disconnect any existing accessories from connector [29B] of the interconnect harness.
- See Figure 5. Obtain the multiple accessory Y-harnesses (items N and O) (purchased separately).
- Connect the single-terminal end of each harness to the corresponding color wire terminal on connector [29B].
- d. Connect all accessories to the two available connectors on each Y-harness.
- 16. Obtain the 2 Amp fuse (6) from the kit, and open the cover of the fuse holder on the fuse holder harness. Plug the fuse into the fuse holder, and close the cover.
- Plug the 3.5 mm stereo jack (with rubber boot attached) on the speaker/ audio cable (C) into the AUX-IN port on the front of the radio.

#### NOTE

When installing the jack plug to the radio port socket,

- roll back the outer lip of the rubber seal,
- install the plug into the port on the front of the radio,
- gently roll the seal back to its original shape to form a seal over the radio port.

This will help eliminate "spring-back" of the plug out of the socket.

18. Plug the 3.5 mm mono jack (without rubber boot) into the audio receptacle on the Hot Shoe.

## **AWARNING**

Be sure that steering is smooth and free without interference. Interference with steering could result in loss of vehicle control and death or serious injury. (00371a)

- Be sure wire is not pinched between the frame and/or forks
- 19. Route the speaker/ audio cable down the fairing to the radio, and secure using adhesive clips (D) from the Road Tech Quest GPS System Kit. Mount the adhesive clips to the face of the inner fairing so that the cable routing is inconspicuous, does not obscure the gauges and will not catch on any part of the motorcycle while riding
- 20. Use the three cable straps (8) from **this** kit to keep the wires clear of gauges and other items under the fairing.
- 21. Install the Road Tech Quest unit and cradle mount into the Hot Shoe per the procedures that follow this section.

#### NOTE

To prevent possible damage to the sound system, verify that the Ignition/Light Key Switch is in the OFF position before reinstalling the Maxi<sup>®</sup> fuse or negative battery cable.

Verify that the Ignition/ Light Key Switch is in the OFF position.

For 2004 and later models: Refer to the Service Manual and follow the instructions given to re-install the Maxi<sup>®</sup> fuse.

For 2003 and earlier models: Refer to the Service Manual and follow the instructions given to re-attach the negative battery cable and install the seat.

- 23. Test the Road Tech Quest unit and the rest of the sound system for proper operation.
- 24. Re-install the outer fairing and windshield. Refer to OUTER FAIRING/ WINDSHIELD (FLHT/C/U); INSTALLATION in the Service Manual.

## **A**WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

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## INSTALLING THE ROAD TECH QUEST UNIT INTO THE CRADLE MOUNT

- See Figure 5. Obtain the Road Tech Quest unit (A) and cradle mount (B) from the Road Tech Quest GPS Kit (sold separately).
- Rotate the antenna (H) on the Road Tech Quest unit upward at least 90 degrees. Slide out the locking lever (J) located on the right side of the cradle mount.
- Position the Road Tech Quest unit above the cradle mount, aligning the slots (K) on the sides of the unit with the tabs (L) on the inside of the mount.
- 4. Slide the Road Tech Quest unit downward into the cradle mount until it snaps into place. Release the lever. The spring return should close the lever and secure the unit. Verify complete closure by gently pressing on the lever after releasing. Rotate the antenna back to horizontal.

## INSTALLING THE ROAD TECH QUEST UNIT AND CRADLE MOUNT INTO THE HOT SHOE

 Align the cradle mount with the Hot Shoe so that the cradle mount slides easily over the grooves (G) in the Hot Shoe. Slide the cradle mount forward into the Hot Shoe until you hear two sharp "clicks".

#### NOTE

If you hear only one click, the cradle mount is not seated completely in the Hot Shoe.

### OPERATING THE ROAD TECH QUEST UNIT

#### NOTE

Do not use solvent-based chemicals or waxes directly on the plastic or rubber components as they can affect the overall performance and appearance of the plastic and rubber.

Refer to the instructions that came with the Road Tech Quest.

## REMOVING THE ROAD TECH QUEST UNIT

To remove the Road Tech Quest unit from the motorcycle when not in use or when leaving the vehicle unattended:

- 1. While pressing downward on the release tab (M) on the top of the cradle mount, pull the assembled Road Tech Quest unit and cradle mount from the Hot Shoe.
- 2. Store the assembled Road Tech Quest unit and attached cradle mount in the case provided.

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## **SERVICE PARTS**

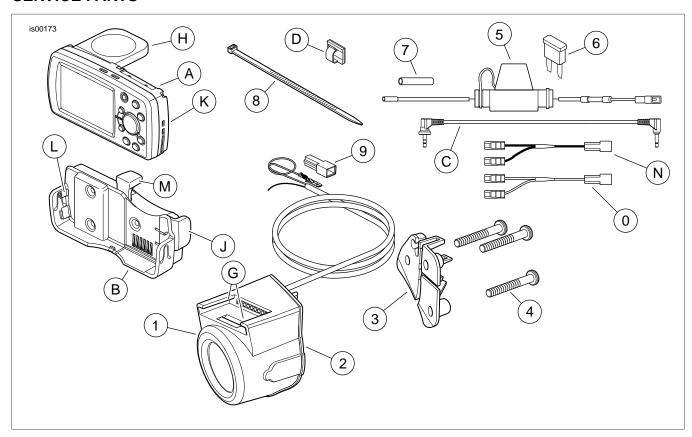


Figure 5. Service Parts, J03554

**Table 1. Service Parts Table** 

Kit	Item	Description (Quantity)	Part Number
Kit 92100-05 Road Tech Quest GPS Mount	1	Hot Shoe	Not Sold Separately
	2	Gasket, Hot Shoe	Not Sold Separately
	3	Back plate, Hot Shoe	Not Sold Separately
	4	Screw, #10-32 x 1-1/2 in., with lock patch (3)	4497
	5	Harness, fuse holder	91724-04
	6	Fuse, blade type, 2 Amp	54305-98
	7	Heat shrink tube, 1-1/4 in. long	Not Sold Separately
	8	Cable strap (3)	10006
	9	Tab housing	72053-92
Items mentioned in	text, bu	t not included in kit:	
Kit 92106-05 Road Tech Quest GPS System, North America	Α	Road Tech Quest unit (North America)	92107-05
	В	Cradle mount	92108-05
	С	Speaker/ audio cable	92153-05
	D	Clip, adhesive (3)	10271
	Е	Case, Road Tech Quest unit (not shown)	92147-05
	F	Owner's manual, Road Tech Quest unit (not shown)	Not Sold Separately

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**Table 1. Service Parts Table** 

Kit	Item	Description (Quantity)	Part Number
Kit 92104-05 Road Tech Quest GPS System, Europe	Α	Road Tech Quest unit (Europe)	92105-05
	В	Cradle mount	92108-05
	С	Speaker/ audio cable	92153-05
	D	Clip, adhesive (3)	10271
	Е	Case, Road Tech Quest unit (not shown)	92147-05
	F	Owner's manual, Road Tech Quest unit (not shown)	Not Sold Separately
Kit 92129-05 Road Tech Quest GPS System, Australia	Α	Road Tech Quest unit (Australia)	76452-05
	В	Cradle mount	92108-05
	С	Speaker/ audio cable	92153-05
	D	Clip, adhesive (3)	10271
	Е	Case, Road Tech Quest unit (not shown)	92147-05
	F	Owner's manual, Road Tech Quest unit (not shown)	Not Sold Separately
Reference items m	entioned	in text	<u> </u>
	G	Grooves in Hot Shoe	
	Н	Antenna	
	J	Locking lever	
	K	Slots in Road Tech Quest unit	
	L	Tabs inside cradle mount	
	М	Release tab	
	N	Harness, multiple accessory (black)	70458-05
	0	Harness, multiple accessory (orange/white)	70459-05

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